

1965 - Nature Reserves for the Preservation and  
Propagation of the Illinois Prairie Chicken  
(Tympanuchus cupido pinnatus)

Proposal - 7 pp.

See prairie chicken

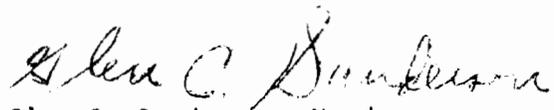
## P R O P O S A L

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Nature reserves for the preservation and propagation of the Illinois  
Prairie Chicken (Tympanuchus cupido pinnatus)

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Recognizing that extirpation of native prairie grouse from Illinois is imminent unless immediate action is taken, request is made, herein, to form a project committee under the Illinois Chapter, Nature Conservancy, with the right to solicit and receive money or land, to purchase open grasslands or lands capable of growing grasses for prairie chicken sanctuaries, to cooperate with the Illinois Prairie Chicken Foundation and the Illinois State Department of Conservation, and to enter into agreements with qualified scientists and institutions for research and educational uses and management of sanctuaries acquired. Initially this committee will be composed of a financial subcommittee represented by Mr. Stuart Otis and Mr. Gaylord Donnelley and an acquisition-research subcommittee represented by Drs. Glen C. Sanderson, and Lewis J. Stannard, and Mr. Frank C. Bellrose, and Mr. William R. Edwards. The terms of these committee members should be for one year, subject to renewal, and the project goal should be a purchase of 300 acres, more or less, in the Bogota, Illinois region at an estimated cost of \$125,000.

  
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## Status of the Illinois Prairie Chickens

Until the early 1900's the prairie chicken was abundant and widespread in Illinois. Since then, due to changes in agriculture, the flocks have been gradually reduced to a few thousand birds located in several southeastern counties in 1962 to a few hundred birds in 1965. (See attached outline compiled by Edwards (1965).) From 1935 to date scientists at the Natural History Survey, cooperating with individuals (mail carriers) and research personnel from the State Department of Conservation and other institutions, have kept close census records of the surviving prairie chickens. The 1965 booming ground census, prior to the nesting season, showed a distribution of flocks as indicated on the accompanying map, with the Bogota (Jasper County) flock being the largest composed of approximately 50 cocks and, presumably, a corresponding number of hens. Other flocks were smaller in size, quite a few having fewer than 10 birds.

Extirpation and near extirpation of prairie chickens has occurred in the past century in all regions east of the Mississippi River,--Ohio, Michigan, Kentucky, Indiana, and Wisconsin. The Illinois flocks, although depauperate, are probably the largest extant natural populations east of the Mississippi. (The Hamerstrom's flock in Wisconsin is composed of introduced birds on non-native range.)

### The Bogota (Jasper County) flock

Five years ago the Illinois Prairie Chicken Foundation, a foundation incorporated by representatives from the Illinois Division of the Izaak Walton League, the Illinois Federation of Sportsmens Clubs, the Illinois Audubon Society, and the Illinois Chapter, Nature Conservancy, purchased a 77-acre refuge (the Ralph E. Yeatter Sanctuary) next to traditional booming grounds of

the largest flock of prairie chickens in Illinois. In 1963 a nearby additional 20 acres (the Max McGraw Sanctuary) was acquired and in 1964 another 60 acres (the Donnelley Sanctuary) was secured. These three refuges and surrounding tracts under the Federal Soil Bank program have helped maintain the Bogota flock with limited success. Unfortunately the acquisition of sanctuaries and the development of suitable nesting cover after acquisition has not been rapid enough to offset continuing losses of cover to an intensifying agriculture. Censuses indicate that, since the spring of 1963, numbers of prairie chicken cocks on booming grounds have declined by about 45 percent.

#### Possibility of preservation

It has been demonstrated repeatedly that the fate of the prairie chicken depends upon the availability of suitable grassy cover in which these birds can successfully hatch and rear their young. With the passing of prairies, prairie chickens lost their native nesting cover. They have not been able to adapt successfully to modern agriculture and cropping patterns. Few birds nest in wheat or other small grains and nests established in hayfields are almost invariably plowed under or destroyed during mowing. Only in southeastern Illinois where late harvested redtop grass was grown for seed were prairie chickens able to persist (Yeatter 1943). Now with the availability of new fertilizers much of the acreage of redtop is being converted to growing corn and soybeans and the remaining prairie chickens are finding fewer and fewer nesting sites. The few sanctuaries established by the Prairie Chicken Foundation of Illinois, supplemented by scattered grass lands left idle under the Federal Soil Bank program, have demonstrated only limited success in slowing the decline in prairie chicken populations.

Biologists of the Natural History Survey estimate that about 500 acres of grassland in 40- to 80-acre tracts in the vicinity of the traditional booming grounds at Bogota is the minimum needed if this flock is to be saved. In view of the rapid decline of prairie chickens and the limited acquisition of sanctuaries to date--157 acres in 6 years, it is apparent that additional support must be obtained if the prairie chicken is to be preserved in Illinois. The addition of about 300 acres planted to redbud or similar grass, in scattered locations within a mile or so of the existing 157 acres of refuges could save the Bogota prairie chicken flock from further decline, and almost certainly, allow it to grow to 200 or more birds.

Refuges in Wisconsin, managed by the Department of Conservation under the wise direction of the Hamerstroms, have proved that sanctuaries can provide proper habitat to allow perpetuation of prairie chickens. In other sections of Illinois, in Peoria and Cook Counties, preparations have been initiated to establish grass habitats for the re-introduction of prairie chickens. For best success, birds for restocking should come from the nearest native or acclimatized stock, such as from the Bogota population. Demands on the Bogota flock as source material for restocking will be made within the next few years.

Besides grasslands, prairie chickens in Illinois prefer high, well drained lands, free of brush and trees. In general, the most favorable habitats are the good farm lands. To make the problem of refuge acquisition more costly, land in the Bogota region as well as in much of southeastern Illinois overlays high grade petroleum pools.

An 80-acre tract that should be acquired for the immediate protection of the Bogota prairie chicken flock involves good farm land with a producing oil

well. Its price of \$500.00 per acre is high but well worth the expenditure as a strategic nesting site. Another 80 acres, at \$312.00 per acre, is available less than 2 miles from the Yeatter Sanctuary and is within the normal range of the Bogota flock. Preliminary inquiries are being made on other lands which might be for sale.

#### Present efforts to preserve the Prairie Chicken in Illinois

The Illinois Prairie Chicken Foundation with limited resources has struggled for 6 years to acquire 157 acres, of which 60 acres has a 10-year mortgage. Considerable sums of money to pay for these sanctuaries came from a few generous donors in the Chicago region; smaller sums from many individuals and organizations have helped. The Foundation would welcome assistance from a Nature Conservancy Committee to speed up land acquisition. At the July 1965 board meeting of the Foundation, a proposed amendment to the By Laws was made to consign all lands to the Nature Conservancy in the event of the dissolution of the Foundation. This proposal is expected to be approved by the affiliated parent organizations.

The State Department of Conservation has aided materially by leasing some grounds in the Bogota area as sanctuary land on a year to year basis. Unfortunately, the 1965 General Assembly of Illinois failed to grant funds to the Department of Conservation, as requested, to permit purchases of land for prairie chicken sanctuaries.

Other State and Federal agencies with statutory authority to provide sanctuaries for endangered species are not yet activated in Illinois, and it may be 3 to 5 years before funds will be available through these agencies for any productive action.

Meanwhile, in the Bogota area, many contracts on soil bank lands will

terminate this year, and it is expected further decreases in grass lands will result.

Since 1963, the Natural History Survey has employed Mr. Ralph J. Ellis, of Bogota, for full time research on the Illinois Prairie Chicken. For a slightly longer period, the Department of Conservation has engaged Mr. John Slachter, of Olney, as field biologist to devote part time to prairie chicken management. From time to time other scientists from the Natural History Survey have supervised or helped in the research on the Prairie Chicken beginning with Dr. R. E. Yeatter in 1935. Recently at the University of Illinois, Dr. Hurst Shoemaker has had promising success in hand rearing young prairie chickens.

All results of these research projects show the need for acquiring additional nesting sanctuaries within the immediate year so that redtop grass can be established for the critical 1966 and 1967 breeding seasons; otherwise the flock will continue to decline to an irretrievably low level.

#### Disposition of sanctuaries

Once acquired, the sanctuaries should be placed with institutions that can provide funds for managing the habitat, for providing facilities for research, and for encouraging educational uses. Representatives of the University of Illinois and Southern Illinois University have expressed interest in accepting such lands. The Natural History Survey would continue research on the Prairie Chicken and other wildlife, and possibly the prairie flora where it can be restored. These sanctuaries would be valuable for teaching and research. In addition to the prairie chicken, the upland plover and Henslow's sparrow nest only in undisturbed grassland. Another 25 to 30 species of birds nest in this type of habitat but are not restricted to it.

The further possibility of establishing a Prairie Chicken Park at Bogota might be feasible if the flock can be saved, at least until State or Federal Park agencies can assume custodianship.

In all cases, revert clauses should be included with the transfers of land to other institutions to insure continuation of the objectives of the Nature Conservancy in preserving the prairie chicken.

#### Reference

Yeatter, R. E., 1943. The Prairie Chicken in Illinois. Ill. Nat. Hist. Survey, Bul. no. 22, (4-5): 377-416.